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10/579,935	05/19/2006	Hans Marc Bert Boeve	NL 031363	3588

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NXP, B.V.
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M/S41-SJ
1109 MCKAY DRIVE
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EXAMINER

NGUYEN, VAN THU T

ART UNIT	PAPER NUMBER
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2824

NOTIFICATION DATE	DELIVERY MODE
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10/23/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary

Application No.

10/579,935

Applicant(s)

BOEVE, HANS MARC BERT

Examiner

VanThu Nguyen

Art Unit

2824

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims 1-11 are pending and examined.

Specification

2. The abstract of the disclosure is objected to because of the followings:
 - It is not on a separate sheet.
 - The phrase "The present invention provides an array ..." on line 1.

Claim Objections

3. Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 9 fails to further limit the array of magnetoresistive memory element of claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1-4, 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,999,339 to Tuttle et al. ("Tuttle").

Regarding claim 1, Tuttle discloses, in FIG. 5, an array of magnetoresistive memory elements (e.g. package 226) comprising:

- a magnetic field sensor unit for measuring an external magnetic field in the vicinity of the magnetoresistive memory elements (e.g. sensors 218 and 220, also see col. 9 ll. 36-48), and
- means for temporarily disabling any programming operation when the measured external magnetic field exceeds a threshold value, implicitly (Tuttle implicitly discloses the claimed limitation with "... a magnetic sensor ... determines the surrounding magnetic field and ... causes modification of operation of the integrated circuit accordingly ...", see col. 10 ll. 64 to col. 11 ll. 2).

Regarding claims 2-4 and 7-9, Tuttle further discloses or inherently discloses the magnetic field sensor unit comprises a plurality of magnetic field sensors, such as sensors 218 and 220; sensors 218 and 220 are adapted to generate output signals; sensor 218 and 220 should to be analog sensors for accuracy; driving circuitry comprising elements 214, 216 and 222 for driving the memory array; a temperature measurement unit for measuring temperature in the vicinity of the magnetoresistive memory elements (see col. 9 ll. 59-67) and operation of integrated circuit should be modified accordingly; clearly package 226 is used in electronic device.

Regarding claims 10-11, they encompass the same scope of invention as to that of claims 1 and 8 except they draft in method format instead of apparatus format. The claims are therefore rejected for the same reason as set forth above.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tuttle in view of U.S. Patent No. 6,760,201 to Nakashio et al. ("Nakashio").

Tuttle discloses, as applied in prior rejection of claim 1, all claimed subject matter except further limitations as set forth in claim 5.

Regarding claim 5, Nakashio discloses all thin-film magnetic head, magnetic memory, and magnetic sensor are constructed with magnetic tunnel element (see Abstract).

Since Tuttle and Nakashio are both from the same field of endeavor, the purpose disclosed by Nakashio would have been recognized in the pertinent art of Tuttle.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to realize that the magnetic sensor and magnetic memory should have the same construction for the ease manufacturing.

Regarding claim 6, the magnetic field sensor unit should be more sensitive to magnetic fields than the magnetoresistive memory elements because it is used for sensing.

Conclusion

8. When responding to this office action, applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner in locating appropriate paragraphs.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VanThu Nguyen whose telephone number is (571) 272-1881.

The examiner can normally be reached on Monday-Thursday, 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Elms can be reached on (571) 272-1869. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 17, 2007


VanThu Nguyen
Primary Examiner
Art Unit 2824